



"Whosoever is guilty of the crime of bringing about disunity, of him let it be said that it were better that a millstone were hung about his neck and that he were cast into the sea."

—Winston Churchill

BULLETIN

of the
**Mahoning
County
Medical
Society**

Vol. XII
March

No. 3
1942



DURING THAT ALL-IMPORTANT FIRST YEAR OF LIFE

The well nourished baby is more resistant to the common ills of infancy. Moreover it is during that all-important first year of life that the very foundation of *future* health and ruggedness is laid. Similac fed infants are notably well nourished; for Similac provides breast milk proportions of fat, protein, carbohydrate and minerals, in forms that are physically and metabolically suited to the infant's requirements. Similac dependably nourishes the bottle fed infant — *from birth until weaning.*



A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, vegetable oils and cod liver oil concentrate.

SIMILAC } SIMILAR TO BREAST MILK

M&H DIETETIC LABORATORIES, INC. • COLUMBUS, OHIO

THE MAHONING COUNTY MEDICAL SOCIETY

OFFICERS AND COUNCIL

WALTER K. STEWART, M. D., <i>President</i> Stambaugh Bldg.	WM. M. SKIPP, M. D.	} <i>Censors</i>
WM. H. EVANS, M. D., <i>Pres. Elect</i> Dollar Bank Bldg.	R. B. POLING, M. D.	
GEO. M. MCKELVEY, M. D., <i>Secretary</i> 101 Lincoln Avenue.	O. J. WALKER, M. D.	
ELMER H. NAGEL, M. D., <i>Treasurer</i> 1705 Market Street	GORDON G. NELSON, M. D.	} <i>Delegates</i>
CLAUDE B. NORRIS, M. D., <i>Editor</i>	EDW. J. REILLY, M. D.	
	JOHN N. MCCANN, M. D.	
	JAMES B. BIRCH, M. D.	} <i>Alt. Delegates</i>
	P. J. MCOWEN, M. D.	
	LEWIS K. REED, M. D.	

MARY B. HERALD, *Executive Sec'y*, 1204 Central Tower

BULLETIN COMMITTEE

CLAUDE B. NORRIS, M. D., *Editor*

ASSOCIATE EDITORS

JAMES L. FISHER, M. D.	PAUL J. MAHAR, M. D.
LOUIS S. DEITCHMAN, M. D.	SAUL TAMARKIN, M. D.
G. E. DECICCO, M. D.	ROBT. G. MOSSMAN, M. D.
J. PAUL HARVEY, M. D.	W. DEAN, COLLIER, M. D.
S. J. KLATMAN, M. D.	W. D. COY, M. D.

Published monthly at 787 Wick Avenue, Youngstown, Ohio

Annual Subscription \$2.00

COMMITTEE CHAIRMEN—1942

Name	Committee	Phone	Address
CLAUDE B. NORRIS	Bulletin	37418	244 Lincoln Avenue
WM. H. EVANS	Program	42147	Dollar Bank Bldg.
WM. M. SKIPP	Public Relations & Economics	42996	220 Lincoln Avenue
J. C. VANCE	Sub-Com. on Economics		Lowellville, Ohio
P. R. MCCONNELL	Sub-Com. on Public Relations	36221	19 Lincoln Avenue
L. H. GETTY	Sub-Com. on Indigent Relief	34418	427 Bryson Street
L. K. REED	Sub-Com. on Vol. Insurance	32422	634 Market Street
B. M. BRANDMILLER	Publicity	29114	2020 Market Street
P. J. MCOWEN	Correspondent	43321	Central Tower
M. W. NEIDUS	Membership & Attendance	36722	Home Sav. & Loan Bldg.
E. J. WENAAS	Social	42147	Dollar Bank Bldg.
W. J. TIMS	Lay Education	39418	19 Lincoln Avenue
J. N. MCCANN	Housing & Library	95217	2724 Mahoning Avenue
D. H. SMELTZER	Medico-Legal	66568	243 Lincoln Avenue
CRAIG C. WALES	Postgraduate Day	43422	1518 Belmont Avenue
RAYMOND HALL	Legislative	42914	Home Sav. & Loan Bldg.
H. E. HATHORN	Public Health	21821	2636 Glenwood Avenue
JOHN HEBERDING	Field Army Against Cancer	66476	151 W. Rayen Avenue
WM. K. ALLSOP	Hospital Relations	66113	Home Sav. & Loan Bldg.
JOSEPH C. HALL	Medical Preparedness	66812	220 Lincoln Avenue
R. E. ODOM	Hard of Hearing	42147	Dollar Bank Bldg.
R. B. POLING	Auxiliary Advisory	28622	2218 Market Street
O. J. WALKER	Red Cross & Civilian Defense	76176	Home Sav. & Loan Bldg.

VOL. XII—No. 3

CONTENTS

MARCH, 1942

PRESIDENT'S PAGE	72
EDITORIAL	73
THE VITAMINS (Cont. from Feb. Issue)	75-79
DIVISION OF MEDICAL SERVICES AND DISASTER RELIEF	82-85
CASUALTY STATION ASSIGNMENTS	85-89
NEWS	93
SECRETARY'S REPORT	95
HONOR ROLL	91
MISCELLANEOUS ITEMS	89-95-96

ADVERTISERS' LIST

Patronize them—they make the
"Bulletin" possible

Blair's Dry Cleaning	66
Buck, Dr. Maynard A.	69
Cassady, C. B.	96
Central Square Garage	66
Cross Drug Store	90
Fair Oaks Villa	68
Francis, J. P. Agency	90
Gierings	70
Heberding's	86
Infant Di-Dee Service	70
Isaly	74
James & Weaver	69
Lyons Physician Supply Co.	67-92
Merrell, Wm. S. Co.	71
McKelvey, G. M. Co.	67
Mead-Johnson & Co.	Cover
Medical-Dental Bureau	68
Mercer Sanatorium	70
Ortho Products	Cover
Overlook Sanitarium	88
Renner's	90
Royal Hotel	96
Schmidt, Paul	70
Scott Company	69
Similac	Cover
Strouss-Hirshberg's	92
Thornton	88
Truedley, H. H. & Co.	90
Valley Drug Co.	94
White Drug Co.	86
Youngstown Printing Co.	94
Youngstown Winery	94
Zemmer Co.	88

"BLAIR- CONDITION" ALL YOUR GARMENTS

Phone 28181 — Niles 22316



Responsible Cleaners and Furriers

24 Hour a Day Service

That is the kind of Service
we offer.

•••

- PARKING
- LUBRICATION
- WASH and POLISH
and EVERYTHING at

Central Square Garage

Wick & Commerce Phone 35167

"Where Doctors Park"

March

HAVE YOU A
Ruptured
 PATIENT?

Through years of experience our factory trained fitters, Mr. H. F. Schafer, Miss Warino, and Miss Moore assure your patients the correct appliance and comfort needed for their individual case.

PRIVATE FITTING ROOMS

WE FIT
 TRUSSES, ELASTIC HOSIERY, BRACES, PTOSIS, SACRO-
 ILIAC, MATERNITY, KIDNEY, AND POSTOPERATIVE BELTS

LYONS PHYSICIAN SUPPLY COMPANY

MANUFACTURING PHARMACISTS

26 Fifth Avenue

Phone 40131

Youngstown, Ohio



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



McKelvey's

Beech-Nut Baby Food

Strained - - - 10¢ 3 for 25¢

Blended - - - 15¢ 2 for 25¢

Vegetables: Peas, green beans, spinach, carrots, beets, squash.

Fruits: Prunes, applesauce and apricots. Oatmeal and blended

cereal. Soups: Vegetable, Beef and liver, vegetable and lamb.

(Infants' Department—Second Floor—McKelvey's)

Since 1894
FAIR OAKS VILLA
Sanitarium CUYAHOGA FALLS, OHIO



A Modern Sanitarium for the Treatment and Care of

Nervous and Mental Patients

ALCOHOL and DRUG ADDICTION



Special Facilities Provided for

Occupational Therapy • Recreational Therapy
 • Hydrotherapy

PRIVATE HOSPITAL

Licensed by the State of Ohio
 E. A. PAISLEY, Business Mgr.

Fair Oaks Villa Sanitarium is
 a member of the American
 Hospital Association and
 Central Neuropsychiatric
 Hospital Association



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



**"QUICK WATSON,
 THIS LOOKS LIKE AN INSIDE JOB . . ."**

AND YOU DOCTOR—MAY BE LOSING BY IT! !

At least you experience some excitement when you are held up at the point of a gun and relieved of your money! But there is little fun in being robbed day by day, dollar by dollar, by the accumulation of old stagnated accounts.

Yet that is what's happening every day in professional offices. Patients that seemed good at the time service was rendered are now doing a stealthy inside job . . . stealing from you through failure to settle promptly. As time rolls on the job is being accomplished more thoroughly.

**You Cannot Afford to Exchange Your Services
 for Mere Promises to Pay.**

The Medical-Dental Bureau, Inc.

Is the Assurance of Tangible Returns for Your Receivables.

J. L. PRICE, Manager

March

For Early Spring Golf Wear

We are showing excellent solid color flannel slacks in cocoa, tan, air-blue, and green—**\$10.50** the pair. Flannel shirts to match or contrast, long sleeved, **\$6.50**.

The Scott Company

32 North Phelps Street



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



ALCOHOLISM

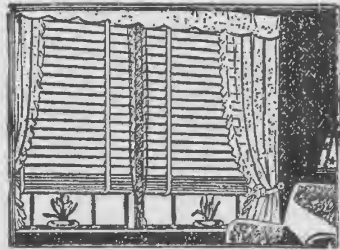
SUCCESSFULLY TREATED
BY THE METHOD
OF

MAYNARD A. BUCK, M. D.

*Only those patients who
sincerely desire treatment
are accepted*

•
ELM MANOR
REEVES ROAD - RT. 4
WARREN, OHIO
PHONE 3443

*For reference write our County,
State or National Medical Ass'n.*



Venetian Blinds



**OFFICE
FURNITURE**

James & Weaver

"Office Outfitters"

4-4427

W. Wood

THE MERCER SANITARIUM

MERCER, PENNSYLVANIA

For Nervous and Mild Mental Disorders.
Located at Mercer, Pennsylvania, thirty miles
from Youngstown. Farm of one hundred
acres with registered, tuberculin-tested herd.
Re-educational measures emphasized, especially
arts and crafts and outdoor pursuits. Modern
laboratory facilities.

Address:

W. W. RICHARDSON, M. D., Medical Director
Formerly Chief Physician, State Hospital for Insane, Norristown, Pa.



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



For
**Healthier and Happier
Mothers and Babies**

• • •

Recommend

Infant
Di-Dee Service

657 Market St.

Call 3-7700

• • •

Used and Approved by the
Medical Profession

**All Kinds of Cut Flowers
and Potted Plants**

PAUL SCHMIDT
Florist

3115 Market St. Phone 2-4212
Youngstown, Ohio

Drink Pepsi Cola

Bottled & Distributed by

The J. F. Giering Bottling Co.
Youngstown, Ohio
Phone 6-2212

March

Prolonged Relaxation from the VISE-LIKE Grip of HYPERTENSION

CONTRACTED ARTERIOLE

RELAXED ARTERIOLE



SINCE hypertension is induced by increased resistance to the flow of blood through the arterioles, the specific need in medical treatment is a preparation that will *relax the vise-like grip on these blood vessels without producing harmful side-effects.*

NITRANITOL

Brand of Mannitol Hexanitrate

appears to approximate this ideal more closely than any previously-used hypotensors, for the following reasons:

- 1. GRADUAL ACTION**—The effect on blood pressure is slow and gradual, minimizing danger of circulatory shock.
- 2. PROLONGED EFFECT**—Having the longest duration of action of any

nitrate or nitrite (see the chart below), arterial pressure can be *maintained* at a point where symptoms of hypertension are generally avoided.

3. SAFETY—Nitrantol can be used over an extended period of time *without toxic manifestations.*

Nitrantol is prepared in the form of scored tablets, each containing $\frac{1}{2}$ gr. mannitol hexanitrate, and supplied in bottles of 100 and 1000. Usual dosage is 1 or 2 tablets every 4 to 6 hours.

NEW—NITRANITOL (brand of mannitol hexanitrate) WITH PHENOBARBITAL. Each scored tablet contains $\frac{1}{2}$ gr. mannitol hexanitrate and $\frac{1}{4}$ gr. phenobarbital. Bottles of 100 and 1000.



Write for complete literature and sample of Nitrantol

THE WM. S. MERRELL COMPANY

Founded 1828 • CINCINNATI, U. S. A.

Trade Mark "Nitrantol" Reg. U. S. Pat. Off.

DRUG	DOSE	EXPERT OF FALL	REACHING AND RETURNING FROM MAXIMAL FALL	MAXIMAL FALL MAINTAINED
<i>Spir. glyceryl nitrat</i>	2-3 min.	25-30	1 2 3 4 5 6 7 8 9 10 11 12	
<i>Sodium nitrite</i>	2-3 gr.	32	1 2 3 4 5 6 7 8 9 10 11 12	
<i>Erythryl tetranitrate</i>	$\frac{1}{2}$ -1 gr.	35	1 2 3 4 5 6 7 8 9 10 11 12	
<i>Mannitol hexanitrate</i>	1 gr.	35	1 2 3 4 5 6 7 8 9 10 11 12	

(Based on results of the work of Mathew, as summarized by Sol'mann, T.: *Manual of Pharmacology*, Philadelphia, W. B. Saunders Co., 1930, page 483.)

PRESIDENT'S PAGE

As this issue of the *BULLETIN* goes to press, nearly one QUARTER of the year is history. To quote: "TIME hurries on with a resistless, unremitting stream, yet treads more soft than e'r did midnight thief that slides his hand under the miser's pillow, and carries off his prize." It is very GRATIFYING to the one whose lot and honor it is to direct the activities of the SOCIETY, to note the accomplishments of the various Committees thus far. Special mention to Dr. Hathhorn and his NUTRITION PROGRAM ably assisted by Betty Barton Greco and Mrs. Hathhorn. Doctors Walker, Skipp and McCarthy, deserve much praise for their splendid organization of the needs of the RED CROSS and CIVILIAN DEFENSE. Dr. Joe Hall looking for a "breather" this year found the CIVILIAN DEFENSE COMMITTEE full of new activity. The PROGRAM COMMITTEE has a real problem in many cancellations due to the war. But thus far, Dr. Evans has been able to meet the problem with able substitute speakers. Under the talented leadership of Mrs. C. D. Hauser and with Dr. Poling's advisorship, the WOMEN'S AUXILIARY has elected to make NUTRITION its project for the year. There will be a refresher course on the subject this month. All members of the AUXILIARY should avail themselves of this splendid opportunity. Dr. Luke Reed has all the latest INFORMATION ON MEDICAL SERVICE PLANS, since his visit to Chicago. The Unsung POOR RELIEF COMMITTEE is continuing to function smoothly. The SOCIAL COMMITTEE did a grand job with the ANNUAL BANQUET. One only needs to read the periodicals from other County Medical Societies to appreciate that our BULLETIN is really a "newsy" magazine. OTHER COMMITTEE ACTIVITIES are worthy of mention at this time but since space does not permit comment upon every one, it is like a jig-saw puzzle, when the pieces are fitted together the picture is one of UNITY of PURPOSE and EFFORT to make this SOCIETY the best one in Ohio.

WALTER KING STEWART, M. D.

President.

March

Editorial---**HAVE FAITH!**

BY JAMES L. FISHER, M. D.

(During this year several members of the Editorial Staff and others will write the editorial for the month. The opinions expressed are in each instance those of the individual writer.—Editor).

First of all, I want you to read Paul Harvey's article again in the February Bulletin. It is hot stuff and I think it is good. What would you expect of one bearing the names of a great apostle and a great medical teacher? While this article may seem to be an answer to it, there is no such intention. The existence of men like him, who will speak out fearlessly is one of the reasons for my choice of title.

Here are some of the sayings we hear nowadays:—"The world is in terrible shape right now and steadily growing worse." "Democracies are rotten with graft and corruption, and anyway a democracy is a poor form of government to manage a war." "Where is the Navy?" "Win or lose, the world will never be like it used to be." "There is too much complacency." "Where are all our planes we are supposed to have?" "The trouble with this country is so and so!" A great deal of our conversation is in pessimistic tone. Right now things are going badly and we and our Allies are taking a beating, and we don't like it. The score stands 14 to 0 against us in the first quarter and we are examining ourselves to see where the weakness lies. We are calling each other names and not pretty ones, either. The coach is calling on the crowd to give the team some support and the crowd is yelling back at the coach to get in there and fight!

Well, it sounds pretty bad but it is a manifestation of a healthy condition. General Wavell once said "War is neither an art nor a science. It is more like a game; and a dirty, rough game at that." This game is

not over and it won't be over until the other side is utterly exhausted and beaten and forced to quit. America is mad—fighting mad, and when we get mad—watch out! We have the power, the resources, the men, the materials and the brains. For purposes of war they have all grown rusty with disuse. That is what happens in a peace loving nation. But a little use will make them bright again. When our swarms of ships and planes descend on Japan via the Aleutian Islands, those war lords will realize that they committed hari kari at Pearl Harbor. What good their conquest of Singapore and Java when China, Russia and the United States close in on them from three sides? Pity the Germans who will have to meet Russia at the peace table. Pity the Germans who have to face the neighbors whose cities they have destroyed and whose brothers they have slaughtered. Yes, pity the Germans as they smash their way through now in their desperation; and they are desperate for they know what is coming.

Have faith that Democracy will win this war. Have faith that the Navy, the Army and the Air Force will prove themselves to be the best in the world. Have faith that the American people will be more closely united when it is over than they ever have been in the past. Have faith that the little people in the little nations will rise again and rejoice in their freedom.

"Win or lose, the world will never be the same." Of course it won't. Who wants it to be?



FIRST

On America's Defense Diet

The more liberal use of Milk for a stronger, healthier America, has been recommended by the country's foremost authorities in a publicized defense diet. The thoughtful co-operation of Doctors, Nurses, Teachers and Nutritionists, along with others of influence in such matters, will help this movement immeasurably.

The Isaly Dairy Company is happy and proud to provide a food so important ... clean, wholesome pasteurized Milk and Cream products ... prize winners in Ohio for three consecutive years.

ISALY'S

Dairy Specialists

THE VITAMINS

By ROBERT B. POLING, M. D.

(Continued from the February Issue)

Vitamin A is produced by the conversion of Carotene formed in the plant world. Carotene is found as a yellow-red plant pigment. The plant pigments from which Vitamin A is derived are: Beta-Carotene, Alpha-Carotene, Gamma-Carotene and Chryptoxanthine. The most important of these is Beta-Carotene. This is composed of a double-bond formula with fifteen atoms of carbon on either side and capable of being hydrolyzed into two molecules of Vitamin A. Carotene represents the precursors of Vitamin A and this is found in the animal body as a colorless substance. The conversion of Carotene precursors into Vitamin A has not been done by chemical processes. It is the only vitamin so far discovered which is a product solely of animal metabolism from precursors which are metabolic processes of plants. The quantitative requirement of Vitamin A is very small. Only a few milligrams daily is necessary for the largest animal. Vitamin A is stored in tissues such as the liver. When it becomes depleted pathological conditions develop.

The more common pathological conditions attributable to Vitamin A deficiency are those affecting especially the eyes, skin and its appendages and the epithelial lining of various organs and ducts. The special pathological lesions produced are:—atrophy of the epithelium and there is substituted stratified keratinizing epithelium arising from a proliferation of basal cells at focal points. These keratinized cells accumulate and by obstructing the ducts of glandular organs cause cysts with eventual atrophy. Bronchiectasis and atelectasis are produced in the lungs. The salivary glands, pelvis of the kidney, uterus, and periurethral glands are involved as well as cutaneous changes. Xerophthalmia, a grave disease of the eye is observed. There

may be atrophy of the testes, retardation and death of fetuses and prolonged gestation, as well as deformities of the teeth, pyorrhea being a factor.

Clinical conditions that occur in Vitamin A deficiencies are decreased ability of dark adaptation and nutritional blindness, a functional disorder of the eye due to inadequate regeneration of the visual purple. Faulty twilight vision occurs because the mechanism for the formation of visual purple in rods of the retina is defective. Visual purple is a conjugated protein in which vitamin A is a prosthetic group. The rods are especially adapted to function in dim light. Keratomalacia and follicular keratosis of the skin as well as a decreased resistance to infection occurs. It has not been specifically proven that there is a Vitamin A deficiency in recurrent colds but Shibley and Spies noted that the duration of colds was definitely shorter in those who received liberal amounts of Vitamin A. Cameron states that while Vitamin A is not a specific remedy for colds and cannot be regarded as curing them, it reduced the severity and the duration when given in generous amounts.

The normal values for Vitamin A in the blood have been found to be about 88 to 100 I. U. per 100 cc of blood. It is not necessary to take blood under fasting conditions. Below 60 I. U. percent is considered Vitamin A deficiency. One of the methods used to determine Vitamin A deficiency is that of the Carr-Price reaction by which a blue color develops when antimony trichloride is added to a solution containing a carotenoid pigment. A photo-electric colorimeter method for estimation of the color intensity is also used. It is a rough index of the utilization of this substance by one highly special-

ized tissue. The blood method is probably more consistently reliable as a criterion of nutritional status. Vitamin A reaches its maximum absorption in five hours after its ingestion.

Some abnormal conditions that cause a Vitamin A deficiency are chronic diarrhea, obstruction of the biliary tract, pancreatic insufficiency, celiac disease and other disorders involving prolonged faulty fat metabolism.

The foods best to utilize in Vitamin A needs are eggs, milk, cream, fish liver oils, and green leafy vegetables.

The minimum daily requirement of Vitamin A for normal adult is about 2000 to 4000 I. U. as recommended by the commission for study of nutrition of the League of Nations. For growing children 6000 to 8000 I. U. are consumed. This amount is supplied by inclusion in the diet daily of one quart of milk, one egg, servings of leafy green vegetables, butter and a teaspoonful of cod liver oil daily. A nursing mother should have an intake of at least 6000 I. U. daily. To utilize carotene and Vitamin A properly, it is necessary that the diet contain a liberal amount of fat, and bile is essential for normal fat digestion and for the absorption of carotene and of Vitamin A. The use of mineral oil in excessive amounts interferes with the absorption of carotene but not with the absorption of Vitamin A.

When a deficiency of Vitamin A exists it is necessary to give double the normal intake in order to correct the condition. That would require about 10,000 units daily. Sometimes very large doses seem beneficial such as 50,000 units or as high as 1,000,000 units have been used. Improvements may be had within two hours with large doses in dark adaption cases. A dose of 10,000 to 25,000 units daily suffice in the average case.

Thiamin functions in the body chiefly if not entirely in the form

of the phosphoric ester, called cocarboxylase. As its name implies this compound acts in the capacity of a co-enzyme to facilitate the decarboxilation or splitting off of carbon dioxide under certain circumstances, and in animal physiology it is concerned with the metabolism of pyruvic acid. By this means it occupies an important position in the utilization of carbohydrates. In the absence of adequate reserves of thiamine, pyruvic acid accumulates in both blood and tissues. A chemical test to determine mild clinical cases has not been accomplished. Thiamine is quite resistant to heat in the absence of alkalis, and destruction by cooking is at a minimum. If the water in which the cooking is done is discarded there is a loss of 25 to 30 percent. Thiamine occurs in greatest abundance in yeast, the germ layer and outer portion of cereal grains and in the organs and tissues of animals. Modern methods of milling grain saves only about 5.5% of original thiamine.

The diseases caused by thiamine deficiency are Beriberi, alcoholic polyneuritis, polyneuritis of pregnancy, anorexia, diarrhea, and is a factor in pellagra, and Korsakoff's syndrome.

Other signs and symptoms of thiamine deficiency are fatigue, heaviness of the lower extremities, calf muscle cramps, pains in the legs, plantar hyperesthesia, burning of the feet, edema and serous effusion in the absence of circulatory failure, constipation, tachycardia, and cardiac dilatation.

The dose of thiamine in therapeutics varies with the conditions. Inasmuch as 2 mg. daily is normally adequate, anything above this amount could be therapeutic in effect. It is thought by some that the highest dose necessary is 25 mg. Others advocate as high as 1000 mg. daily for severe conditions such as circulatory failure and shock.

The signs and symptoms of riboflavin deficiency are burning and

March

itching of the eyes, photophobia, rapid visual fatigue, blurred vision, soreness of the lips and macerated cracking of mucous membrane at the corners of the mouth, fine scaly slightly greasy desquamation in the nasolabial folds or alae nasi and ears, corneal vascularization and keratosis.

The signs and symptoms of nicotinic acid deficiency are a scarlet red stomatitis, ulceration of the floor of the mouth, diarrhea, stupor and psychosis. Pellagra is the chief disease condition due to nicotinic acid deficiency.

The signs and symptoms of Vitamin B₆ deficiency are insomnia, weakness, irritability and nervousness.

To make a concrete example of Vitamin B complex, a case history is borrowed from the literature. This was a thirty-four year old female. She complained of weakness, bleeding gums, sore mouth, and tongue and a rash on the face and hands, all of some few weeks duration. She had been an epileptic since the age of three. Her diet consisted of the following:—*breakfast*: oatmeal, coffee, white bread; *lunch*: white bread and butter, potatoes, a portion of stew; *supper*: tea, white bread and butter, prunes, and apricots. She received one egg each week and she ate a good deal of cake. The main constituents of her diet were cake and white bread.

She was a thin, undernourished, chronically ill female. The epithelium of the lower lip showed degeneration with scaling and desquamation (cheilosis). There were fissures at the angles of the mouth extending about 2 mm. laterally in each direction from the mucocutaneous junction. There was moderate maceration of tissues at the angles of the mouth. In the naso labial fold and across the bridge of the nose there was a seborrheic lesion consisting of fili-form excrescences about 0.5 mm. in length which appeared to protude from the sebaceous glands. There

was an acneform eruption over the face. The gums of the lower jaw were red and markedly piled up consisting of bags of blood which bled on light touch. The tongue was clean, bald and reddened as were the oral mucous membranes. Along the frenulum of the tongue were ulcerations covered with a pearl gray exudate. On the right hand there was deep pigmentation over the second interphalangeal joint and thumb, a small ulceration over the knuckles and a bracelet-like pigmented dermatitis of the wrist. A diagnosis of riboflavin, nicotinic acid and cevitamic acid deficiency was made.

The patient was maintained with a diet poor in Vitamin B Complex, and a total absence of cevitamic acid. She was given 300 mg. of cevitamic acid daily by intravenous injection and 100 mgs. four times daily by mouth. On the second day of this regime there was definite improvement and on the following day the gums were natural in color. The stomatitis and glossitis had remained unchanged. The dosage of cevitamic acid had been reduced to 200 mg. daily by mouth while the diet poor in Vitamin B Complex was continued.

From the sixth day of hospitalization the patient was given 500 mg. of nicotinic daily in doses of 100 mg. each by mouth. By the 8th day of hospitalization the abnormal redness of the tongue and mucous membrane of the mouth had disappeared, the frenulum ulcer had healed and the dermatitis of the hand was clearing. The lesions on the face and lips were unchanged.

Beginning on the seventeenth day of hospitalization, the administration of nicotinic acid was discontinued, but the patient was still maintained with the diet poor in Vitamin B Complex. In addition, 10 mg. of synthetic riboflavin was administered daily by mouth. On the fifth day of this regime, a definite and marked

improvement was noted. The degenerative epithelial lesion of the lips and the fissures at the angles of the mouth had cleared entirely and the filiform lesions in the nasolabial folds and bridge of the nose had disappeared; the acneform rash was improved.

The patient now showed definite signs and symptoms of Vitamin B₁ deficiency. She was given 50 mg. of thiamin Chloride daily by intramuscular injection. This was followed within three days by complete disappearance of the signs and symptoms of peripheral neuritis.

Now on the 27th hospital day the patient was given the house diet supplemented by 200 cc of orange juice and 18 gm. of Vegex and the administration of riboflavin, cevitamic acid and thiamine chloride was discontinued. The strength of the patient was markedly improved and her weight increased from 84 pounds to 111 pounds when she was discharged 26 days later.

The swollen spongy bleeding gums responded to cermitamic acid therapy; the scarlet red stomatitis, glossitis, ulceration of the floor of the mouth and the dermatitis of the hands responded to nicotinic acid therapy; the cheilosis and angular oral fissures and the filliform dermatitis of the face responded to riboflavin therapy; the polyneuritis responded to Vitamin B₁.

Vitamin C was discovered through recognition of a deficiency disease. Scurvy has been known since the time when men first began to sail the sea in ships and it was in connection with voyages of exploration that the condition became most widely recognized. One of the first therapeutic agents used for the cure of scurvy was the bark and leaves of the Amenda tree in 1600. In 1753 the English navy rid itself of scurvy by the use of lemons. The isolation of hepuronic (ascorbic) acid was announced 180 years later in 1932 by

Waugh and King in the United States and by Svirbely and Szent-Gyorgyi in Hungary. The pure material was obtained first from the adrenal cortex of animals and from cabbage leaves. Since then it has been found widely in plant and animal tissues. Ascorbic acid is unusually sensitive to oxidation. This instability is greater when the solution is alkaline. It is not oxidized in acid solutions. The only animal species that depend upon external sources for ascorbic acid are guinea pigs, primates and man. These species have the power of endogenous synthesis in amounts adequate to prevent the development of scurvy. Its chief function is the maintenance of connective tissue of various types—particularly the intercellular substance. This is well demonstrated in the weakness in the walls of capillaries throughout the body. Also in weakness in the attachment of the periosteum which becomes most prominent at muscular insertions and may lead to subperiosteal hemorrhages. Bone growth ceases because of the inability of osteoblasts to form normal bone. The teeth are affected because of the resorption of dentin and the atrophy of odontoblasts. The gums are affected only when teeth are present by a process which causes swelling, sponginess and bleeding. Resorption of bone in the alveolar processes causes loosening of teeth. Other lesions included are the degeneration of the skeletal muscle, bloody effusions, anemia, cardiac enlargement and atrophy of the adrenals and other endocrine organs.

In order to maintain the ascorbic acid in foods they should be kept in acid solution and refrigerated and away from the sunlight. Boiling or stewing of food with constant stirring destroys the entire content of ascorbic acid. Anaerobic heating results in practically no loss. Copper has a destructive effect. Cooking should not be done in copper utensils. It is of distinct advantage to have

March

the water in which vegetables are cooked at a boiling temperature before they are added. This inactivates the enzymes and oxidation is minimized. Pickling, salting, curing, fermenting and leaching result in complete loss while freezing and drying are consistent with a retention of good potency.

Raw whole milk of cows usually contains 25-30 mg. or 500 to 600 I. U. per litre. Pasteurization destroys about one half of it. Human milk contains five times as much Vitamin C as does cows milk.

Orange juice contains 30 to 100 mg. per 100 cc of the juice. The same is found in lemons and grape fruit. When these fruits are left standing at room temperature in the open air, half of the antiscorbutic acid is lost in four hours. Canned juices if prepared by the best method retain up to 90% of their original potencies.

The daily requirement for Vitamin C is from 50 to 75 mg. or 1000 to 1500 I. U. The consumption of less than 25 mg. of Vitamin C produces scurvy. Infants under one year of age need 10 mg. daily as a minimum. Growing children between one and twelve years need 20 mg. daily. Conditions in which a large amount of Vitamin C is needed are in severe infections, pregnancy, thyrotoxicosis, severe exercise and fevers resulting from any cause.

The ascorbic acid content of blood usually exceeds 1 mg. per 100 cc of blood. From 1 to 0.5 mg. percent may be considered borderline. Below 0.5 mg. percent represents a definite deficiency. The Rumpel-Leeds test for capillary fragility is not dependable as a criterion of Vitamin C nutrition when checked against the better chemical methods.

The therapeutic dose of Vitamin C must be several times the daily adult human requirement in health. It is recommended that 200 to 300 mg. be given two or three times daily in severe deficiency. Mention may be

made of other diseases in which Vitamin C may be beneficial. These are, rheumatoid arthritis, acne Vulgaris and lead poisoning, lupus erythematosus, acute coryza, chronic sinusitis, rheumatic fever, allergies, progressive muscular atrophy, and defective healing in surgical wounds.

The laboratory tests to determine the amount of Vitamin C in the body are—

1. The Saturation Test
2. Capillary Fragility Test
3. Blood Determination.

The most accurate and most valuable test is the blood determination test. The micro-technic described by Farmer and Abt is in our experience, reasonably simple and accurate. The method was devised to obviate obtaining blood by vein puncture. Sufficient test material was obtained from 0.3 ml. of capillary blood by skin puncture and placed in a special vial with potassium oxalate to prevent coagulation. To 0.1 ml. of blood plasma, distilled water 0.1 ml. and metaphosphoric acid solution 0.2 ml. were added to precipitate the protein. Deproteinized plasma 0.2 ml. was then titrated with a standard dye solution using a micro burette.

The use of capillary blood for the test, although particularly useful with infants and for frequent examinations of adults, introduces certain errors. By skin puncture a variable arterialvenous mixture of blood is obtained with possible admixture with tissue fluids, and hemolysis is not infrequent.

Blood obtained by vein puncture allows for greater constancy in results. A larger quantity of blood is obtained, which decreases the difficulties and attendant errors in handling minute quantities. Sufficient plasma is also available for checking results. For routine practice we use venous blood and have increased the individual quantities in the test technique, retaining the principles of the method.

MARCH - - - Big Month

DR. ROY W. SCOTT

Professor Clinical Medicine

Western Reserve University Medical School

Cleveland, Ohio

Subject: "Clinical Aspects of Arteriosclerosis as they Pertain to the Management of Hypertension."

As a speaker, writer, investigator, and clinician, Dr. Scott is accepted everywhere as the equal of the best. The Program Committee once more brings to us one who will add luster to our Society's record of high scientific excellence. Added to that is the great pleasure we shall feel in having one whom most of us know as an esteemed personal friend.

YOUNGSTOWN CLUB

Tuesday, March 17th, 8:30 P. M. (W.T.)

RED CROSS - - - March 19th

Doctors, please note Mr. McDaniel, National Red Cross Examiner, Washington, D. C., will talk to us on Thursday, March 19th.

Mr. McDaniel's purpose in holding this meeting is not to teach first aid. He is more interested in having us ask him questions regarding first aid and examination problems, and through us to teach laymen as to their work until the Doctor comes, emphasizing to the laymen what NOT TO DO! Unwise "first aid" may ADD grave injury to the injuries already suffered, or may interfere seriously with the Doctor's efforts when he gets there.

Be sure to hear Mr. McDaniel. TIME and PLACE of meeting will be telephoned to you later.

April Fifteenth

ANNUAL POSTGRADUATE DAY

The Mahoning County Medical Society
with ever-rising pride
presents
another great Postgraduate Faculty
from

Northwestern University Medical School

(Sixty-nine from the Faculty of Northwestern are in the service.
We appreciate their efforts and co-operation).

FACULTY MEMBERS AND TITLES

Dr. J. R. Buchbinder, Associate Professor of Surgery:

1. Acute Diffuse Peritonitis: Pitfalls in Diagnosis and Some More Recent Concepts of Treatment.
2. The Present Status of Surgery for Duodenal Ulcer.

Dr. Harry Culver, Associate Professor of Urology:

1. Traumatic Conditions of the Male Urethra and Bladder.
2. Non-specific Upper Urinary Tract Infections.

Dr. Paul S. Rhoads, Assistant Professor of Medicine:

1. Clinical Feature and Treatment of Pneumonia, 1941-42 Season.
2. Hemolytic Streptococcus Infections of the Throat and Nose: Their Importance as a Clinical and Public Health Problem.

Dr. Geo. H. Gardner, Assistant Professor of Obstetrics and Gynecology:

1. Pelvic Endometriosis—An Increasingly Frequent Clinical Problem.
2. Management of the Barren Marriage.

Wednesday, April 15th, 1942

Pick-Ohio Hotel

(To our out-of-town friends: Note that the date this year is set purposely for the day many of you "take off." Please plan to spend it with us!)

Division of Medical Services and Disaster Relief

By O. J. WALKER, M. D., Coordinator M. S. C. D.

(Editorial Comment—One of the most important divisions in the entire Civilian Defense Program is the Division of Medical Services and Disaster Relief. So as to correctly inform the Medical Profession of Mahoning County of the splendid accomplishments of this Division, I have asked Dr. O. J. Walker, Chief Co-ordinator, to describe this organization—C. B. N.)

In the space allotted I shall give as complete an explanation as possible of the organization known as the Division of Medical Services and Disaster Relief of the Civilian Defense. Last year when President Roosevelt declared a state of emergency, the National Headquarters of the American Red Cross immediately issued instruction to all its various Chapters to reorganize and set up for any possible emergency its regular Committee of Disaster and Preparedness Relief. The Youngstown Chapter of the Red Cross, under the leadership of Mrs. Fred M. Orr, Chairman, ordered the reorganization of such committee. Space will not permit the inclusion of all the names of those chosen to act as chairman and co-chairman of the committee and subcommittees throughout this City and County. Mr. M. Z. Bentley was named Chairman of the Central Committee and Mr. A. E. Adams, Jr., as Co-Chairman. Fifteen other representative business and professional men were made members of this committee. These men were the chairman of the sub-committees which were necessary to cover every possible physical need in time of a disaster or epidemic. A summarization of these various sub-committees might give a general idea of their broad scope and importance. There are Committees on Clothing, Communi-

cation and Public Information, Registration and Information, Rescue and Transportation, Medical Aid, Survey and Shelter, Central Purchasing, Fund Raising, and Food. County representatives from Canfield, Greenford, North Lima, Lowellville, New Middletown, Austintown, North Jackson, Boardman, Poland, Campbell, New Springfield, Milton, Ellsworth, Sebring, Petersburg, Berlin Center, Beloit, Struthers, Goshen Township and Smith Township, were among those included in the committee.

Later when a State of War was declared, the Disaster Preparedness and Relief Committee as organized by the Red Cross, became the Division of Medical Service and Disaster Relief of the Civilian Defense. Myself and Dr. William M. Skipp, Chairman and Co-Chairman, respectively, of the Committee on Medical Aid, were appointed Co-ordinator and Assistant, respectively, by Lt. Colonel Donald J. Lynn, Executive Director of Civilian Defense. Since that time the committees and sub-committees heretofore mentioned, are functioning as before, but to these have been added other divisions which we considered vitally important. We have added a number of Assistant Co-ordinators, a Medical Advisory Council, Division of Spiritual Ministry which includes representatives of all faiths, Pharmacy Services and Mortician Services. The original Red Cross Medical Aid Committee was further sub-divided into the Division of Medical Field Services (Casualty Stations and First Aid Posts) Division of Hospital Services, Division of Public Health Services and Division of Nursing Services. These together with the previously mentioned three Divisions are known as the Professional Services.

March

The other Red Cross sub-committees were grouped together under the title of Division of Red Cross and Disaster Relief Services and constitute those lay services which their several titles indicate. All divisions are of equal importance and all services are interdependent on one another in the development and functioning of the Emergency Medical Division of Civilian Defense. Whole hearted, unselfish cooperation and team work on the part of each individual committee has made possible the present development of the plans and the continued spirit of co-operation will assure a smoothly functioning organization.

The work of the organization embraces the entire Mahoning County.

For instance now, the Division of Medical and Field Services, Casualty Stations and First Aid Posts, under the leadership of Dr. William M. Skipp, Chairman and Dr. W. J. McCarthy, Co-Chairman. In the City of Youngstown, we divided the entire city into seven sections and nineteen districts. Each district approximates ten thousand persons. In the County, we have set up twelve other districts each serving a population ranging from three to fourteen thousand people. This makes a total of thirty-one districts in the entire county. In the event of an epidemic or disaster, Casualty Stations located in each of these districts will be prepared, properly manned and fully equipped, to serve and minister to all who require such aid in that district.

The personnel for a full station comprises, one Medical Supervisor, one Building Supervisor, 4 Doctors, 4 Nurses, 4 Aides (trained in First Aid), 4 Clerks, 2 Chaplains, 4 Ambulance Teams (Driver and Assistant—8 men in all who must have had First Aid Training), 2 Station Wagon Drivers and Assistants (8 in all—all First Aid Training), 8 Stretcher Squads (4 men per squad—32 men in all—all with First Aid Training),

one Stretcher Squad Leader (Trainer and Drillmaster), 4 Messengers (Boy Scouts—with Bicycles) and one Custodian of Equipment. This makes a total of 70 people per station. The personnel of the County Stations will be the same as in the City of Youngstown—proportioned on a basis of population in the district.

Equipment

The following equipment is necessary for each Casualty Station: 8 stretchers, 24 cots, 2 tables (for clerks), 2 tables (for dressing), 4 ambulances (2 stretchers each), 2 station wagons or automobiles, 12 folding chairs, one waste basket, one trash can, 6 bath basins, 6 ped pans, 64 blankets, 24 pillows, 48 pillow cases, 96 sheets, 8 gowns (doctors), 16 gowns (nurses), 120 bath towels, 80 face towels, 10 pairs rubber gloves and 24 dozen celluwipes. In addition, each physician team will be equipped with First Aid Kits containing medicines, dressings, splints and instruments. Also in each Casualty Station will be stored a trunk packed with stocks of these supplies from which kits will be replenished as used. Larger stocks of medical supplies are being stored in hospitals and drug houses where an adequate supply to meet emergency conditions has been assured.

Casualty Stations

The Cities of Youngstown, Struthers and Campbell, have been so divided in population areas so that with a few exceptions, the districts come down to the valley of the Mahoning River and Crab Creek, along which our main industries are located and consequently the most vulnerable spots. Casualty Station sites have been located on the brow of the hills out of danger of flood or extensive fires or explosions. One main site with 2 and 3 alternate sites in each district have been selected. Schools, churches and clubs have for the

most part best served our purpose.

In addition to these 31 Casualty Stations, 9 similar mobile units attached to our hospitals will serve as field units with which to man first-aid posts, emergency hospitals and evacuation hospitals.

Inasmuch as it is improbable that all sections of the county will suffer major disaster at any one time, it is planned in case of disaster striking one section, casualty station units from other districts and the mobile field units will be used to supplement the unit in the involved district, each unit serving 8 hours in the twenty-four.

Furthermore, in case of widespread epidemic, as in 1918, it is contemplated that these casualty station units will serve as clinic centers to minister to the sick of that district.

Hospital Services

The Division of Hospital Services under the leadership of D. A. Endres and Sister M. Germaine, have planned for 1200 bed capacity if needed. In selecting the physicians for casualty stations, those physicians on the active staff of both hospitals were not used leaving them to man the medical services of the regular and emergency hospital services. However, 9 mobile field squads (4 physicians each), 5 from the Youngstown Hospital and 4 from St. Elizabeth's were organized from the active staff. These 9 squad units have a complement of nurses, aides, ambulances, autos, litter squads and chaplains, (each unit comprising 62 people) and will be used to establish First Aid Posts in disaster areas, man Emergency Hospital Units, and assist other units where and when necessary.

Under the plan for handling emergency hospitalization, the Youngstown Hospital and St. Elizabeth's plan to provide 300 additional beds by using every available space within their own walls. Furthermore, by evacuation of convalescents and children to

homes and previously chosen convalescent sites, they can provide for an additional 200 beds. This will care for a total of 500 emergency cases.

If it becomes necessary to care for more than the above plan calls for, sites have been surveyed and plans made to man and equip 1200 additional beds as follows: South High School, 200; Rayen School, 200; East High School, 100; Chaney High School, 100; Memorial High School, Campbell, 100; Struthers High School, 50; Westlake Settlement House, 50; Hillman Junior High School, 100; Princeton Junior High, 100; Wilson Junior High, 100; and Buechner Hall, 100.

Based upon a 200-bed hospital each emergency hospital will require a nursing staff working 3 shifts of 8 hours each, superintending nurse, 6 supervisors, 12 general duty nurses, 22 ward aides and 6 orderlies, and a dietary staff, preferably those on staff of school cafeterias, 3 cooks in 2 shifts; 2 dishwashers and 16 tray girls.

Twenty-four hour telephone service is necessary, as is 24-hour admission service, clerical help, janitor and transportation service.

Other Services

The Division of Public Health Services under the leadership of Dr. R. G. Mossman and Dr. S. G. Patton, are planning to extend their present personnel and equipment by a corps of voluntary workers who can be called on if the need arises for widespread quarantine, prophylaxis and other public health services.

The Division of Nursing Services under the leadership of Miss Emma S. Modeland and Miss C. M. Fawcett, and in conjunction with the Red Cross, are active in providing training courses for nurses aides in the hospitals, refresher courses for older nurses who have been out of

March

practice and classes in first-aid and home nursing for all volunteers who wish this instruction. Fifty first-aid instructors are now at work and within another month this crop of instructors is expected to be quadrupled. Graduate nurses now in private duty have been assigned to casualty station units, field units and emergency hospital units.

The Division of Pharmacy Services under the leadership of C. V. Dobson and John Bloom is making plans to stock where feasible and know where to readily obtain such drugs as might become necessary in event of major disaster or epidemic.

The Division of Morticians Service, under the leadership of Edward A. McVean and Fred B. King, is likewise planning to greatly increase their facilities in order to meet any emergency. Some 60 ambulance units are being furnished to the Hospital Mobile Units and Casualty Stations. In addition, this plan calls for organizing and training a voluntary auxiliary mortician corps, establishment of a central morgue and registering and organizing of Truck and Cemetery Services.

The seventh division, that of Red Cross and Disaster Relief Services, under the leadership of Mrs. Fred M. Orr, M. Z. Bentley and A. E. Adams, comprising 8 sub-committees, work in cooperation with the 6 professional divisions in providing the various services which their names indicate. For instance, the sub-committee on rescue and transportation have planned for emergency ambulance service and organizing and instructing stretcher squads. The Red Cross Motor Corps has organized a fleet of station wagons and automobiles. The young women drivers and assistants in these units all have had training in motor mechanics and first aid.

The Committee on Survey and Shelter surveyed and found casualty stations and emergency hospital sites

and have plans for sheltering homeless, if such need arises. Providing food and clothing and bedding for such, is being planned by the Committees on Food and Clothing. Registration of casualties and homeless will be under the Committee on Registration and Information. Red Cross Representatives in each school district throughout the county have rendered valuable assistance in organizing the county casualty station units and will continue as the authoritative head in the functioning of these units.

As already stated, the original Red Cross Committee on Disaster Preparedness and Relief has been taken over in toto and has been the backbone, so to speak, of the organization of the Division of Medical Service and Disaster Relief of the Civilian Defense. Had it not been for the high degree of organized efficiency already functioning in this Red Cross Committee, we would probably not be at the present time as well along with our organization for Civilian Defense.

To the organization already outlined above, has been added a Division of Spiritual Ministry under the leadership of Rev. Paul Gauss, Chairman, and Rev. Father Joseph N. Trainor, Co-Chairman, representing the various religious faiths of the community. This Committee has assigned chaplains for duty at all casualty station districts, to the field units, emergency hospitals and shelter units.

This, I hope, without going into further detail will give a broad idea of the organization of the division to date.

Casualty Station Assignments

Section A. District No. 1. Scienceville High—Lawrence Segal, Supervisor; J. M. Russell, Asst. Supervisor; S. H. Davidow, Leader; A. D. Armstead, Louis Goldman, W. J. Simone.

Section A. District No. 2. East High School—Lawrence Segal, Supervisor; J. M. Russell, Asst. Supervisor; D. A. Bel-



Pinusote

The PINUSOTE formula instantly reveals itself as possessing valuable expectorant properties for the treatment of coughs.

Strongly medicated, PINUSOTE is, never-the-less, elegant and palatable. It has a pleasing red color.

Formula

Each ounce of Pinusote contains:

Ethylmorphine Hydrochloride, $\frac{1}{4}$ gr.

Creosote and Guaiacol Sulfonates, 4 grs. ea.

White Pine and Wild Cherry, 30 grs. ea.

Ammonium Chloride, 8 grs.

Sassafras, 2 grs.

Chloroform, 2 minims.

Tartar Emetic, $\frac{1}{12}$ gr.

Spikenard, Balm Gilead, Blood Root, 4 grs. ea.

The narcotic strength may be increased as conditions demand. The Creosote and Guaiacol Sulfonates present are effective means of checking the gastric fermentation frequently associated with coughs and colds.

NOTE: We can also supply a Sugar-free Cough Syrup, if indicated.

WHITE'S DRUG STORES

Dependable Prescription Druggists



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



TREAT THE WHOLE FAMILY BY PRESCRIBING

HEBERDING'S

MILK and CREAM

FURNISHED BY FAMOUS PRIZE WINNING

COWS - - - NONE BETTER.



CALL

Indian Creek Farm

Florence L. Heberding

Phone 2-4222

inky, Leader; J. M. Basile, K. K. Maltbie, Phillip Hodes.

Section A. District No. 3, Oak St. School—Lawrence Segal, Supervisor; J. M. Russell, Asst. Supervisor; M. I. Berkson, Leader; A. E. Frank, Peter P. Ross, C. J. Shaffer.

Section B. District No. 4, Wood St. School—J. P. Harvey, Supervisor; J. M. Ranz, Asst. Supervisor; A. A. Rosapepe, Leader; M. H. Speck, L. R. Mallory, Fred E. Elder.

Section B. District No. 5, Harding School—J. P. Harvey, Supervisor; J. M. Ranz, Asst. Supervisor; Alice Elliott, Leader; Rose Middleman, Consuelo Wise, David Welch.

Section B. District No. 6, Stambaugh Auditorium—J. P. Harvey, Supervisor; J. M. Ranz, Asst. Supervisor; Michael S. Zervos, Leader; W. P. Young, John Parillo, O. G. Dreiling.

Section C. District No. 7, Covington St. School—P. J. Fuzy, Supervisor; J. M. Ranz, Asst. Supervisor; Morris Belmont, Leader; B. B. Burrows, L. R. Watkins, R. S. Gaskeen.

Section C. District No. 8, Hayes School—P. J. Fuzy, Supervisor; J. M. Ranz, Asst. Supervisor; Lawrence Weller, Leader; D. H. Levy, Frank Grimmett, P. L. Connor.

Section D. District No. 9, Stambaugh School—L. G. Coe, Supervisor; Ivan C. Smith, Asst. Supervisor; M. P. Mahrer, Leader; E. R. Brody, R. R. Centello, H. W. Zellers.

Section D. District No. 10, Chaney School—L. G. Coe, Supervisor; Ivan C. Smith, Asst. Supervisor; S. Sedwitz, Leader; M. M. Kendall, D. V. Bender, S. N. Farkes.

Section E. District No. 11, Grant School—D. E. Montgomery, Supervisor; Elmer Nagel, Asst. Supervisor; T. A. Lander, Leader; L. J. Malock, M. J. Sopkovich, R. E. Ruth.

Section F. District No. 12, Epworth M. E. Church—Elmer Nagel, Supervisor; D. E. Montgomery, Asst. Supervisor; N. J. Nardacci, Leader; Clyde W. Hall, E. A. Machin, W. H. McCreary.

Section F. District No. 13, South Ave. School—Elmer Nagel, Supervisor; D. E. Montgomery, Asst. Supervisor; W. C. Autenreith, Leader; E. Weltman, Harry E. Sarchet, C. H. Harder.

Section F. District No. 14, Bennett School—Elmer Nagel, Supervisor; D. E. Montgomery, Asst. Supervisor; C. Stefanski, Leader; R. W. Rummell, John W. Tarnapowicz, A. E. Smith.

Section E. District No. 15, Princeton School—D. E. Montgomery, Supervisor; Elmer Nagel, Asst. Supervisor; H. S. Banninga, Leader; G. Delfs, H. M. Bennett, John C. Eschliman.

Section D. District No. 16, Cleveland School—L. G. Coe, Supervisor; Ivan C. Smith, Asst. Supervisor; L. J. Goldblatt, Leader; Guy Parillo, Fred Middleton, Harry S. Gaskeen.

Section E. District No. 17, Sheridan School—D. E. Montgomery, Supervisor; Elmer Nagel, Asst. Supervisor; W. D. Coy, R. W. Beede, E. L. Bailey, H. S. Heckert.

Section G. District No. 18, United Presbyterian Church, Pleasant Grove—R. B. Poling, Supervisor; Wendall Bennett, Asst. Supervisor; E. H. Hake, Leader; G. C. Warnock, Morgan W. Baker, K. S. Fleming.

Section G. District No. 19, Wilson School—R. B. Poling, Supervisor; Wendall Bennett, Asst. Supervisor; Enrico Dilorio, Leader; O. D. Brungard, J. R. Malkoff, A. M. Friedman.

District No. 20, Campbell, Ohio, Gordon School—E. J. Reilly, Leader; A. B. Sherk, W. H. Atkinson, J. P. Tate.

District No. 21, Struthers High School—P. B. H. Smith, Leader; J. F. Dulick, E. D. Surridge, Kenneth L. Osborne.

District No. 22, Lowellville, Ohio and Coitsville Township, outside Campbell Casualty Station, Lowellville High School—S. S. Badal, Leader; J. C. Vance, J. W. Davis.

District No. 23, Poland High School—C. C. Stewart, Leader; Charles A. Reynolds, J. Chessrown, W. C. McCord.

District No. 24, Boardman High School—W. K. Stewart, Leader; D. M. Rothrock, J. R. Westerfield, I. A. Kirby.

District No. 25, Canfield and Ellsworth Townships, Casualty Station at Canfield High School—C. H. Campbell, Leader; C. Herbert Cronick.

District No. 26, Austintown and North Jackson Townships, Casualty Station at Austintown-Fitch School, Sub. Station at North Jackson School—W. X. Taylor, Leader; T. L. Blair, Charles Wagner, Ross Wales.

District No. 27, Berlin Center and Milton, Casualty Station at Berlin Center School, Sub. Station at Milton Township House—Carl H. Weidmer, Leader; D. K. Hogg.

District No. 28, Smith Township, including E. Alliance, Sebring, Beloit, Westville and Garfield, Casualty Station, McKinley School, Sebring—J. H. Smith, Leader; A. L. Atkinson, E. C. Southan, A. M. Overland, J. M. Warren.

District No. 29, Greenford and Goshen Townships, outside Garfield, Casualty Station, Greenford High School—P. H. Leimbach, Leader; J. M. Cavanaugh.

District No. 30, North Lima Township, Casualty Station, North Lima School, North Lima—H. P. McGregor, Leader; A. H. Alden, W. H. Weickenand.

OVERLOOK SANITARIUM

New Wilmington, Pa.

A beautifully located sanitarium, just fifteen miles from Youngstown, especially equipped for the care of psychoneurosis. Mental cases and alcoholics not admitted.

Re-educational Methods

Rest Cure

Psychotherapy

Hydrotherapy

Elizabeth McLaughry, M.D. Elizabeth Veach, M.D.



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



SCIENTIFICALLY THORCLENE D CLOTHES Keeps You Fit

LADIES' PLAIN DRESSES,

MEN'S SUITS

\$1

SHIRTS, beautifully laundered,
one or a hundred, with every
dollar's worth of dry cleaning.

9c

PHONE 40155

GIRARD 46-56210

THORNTON

NILES 46-56210

LAUNDRY & DRY CLEANING CO.

**ALWAYS
DEPENDABLE
PRODUCTS**

Prescribe or Dispense ZEMMER

Pharmaceuticals. . . Tablets, Lozenges,
Ampoules, Capsules, Ointments, etc.
Guaranteed reliable potency. Our
products are laboratory controlled.

Write for catalog.

Chemists to the Medical Profession.

THE ZEMMER COMPANY, Oakland Station, PITTSBURGH, PA.

March

District No. 31, Springfield Township, Casualty Station at Petersburg, New Middleton and Springfield—James E. Allgood, Leader; C. F. Yauman, Thomas Blackwelder, John Thomas, Poland.

District No. 32, Girard High School—H. E. Mathay, Leader; D. R. Williams, H. E. Chalker, A. E. Ewing, O. L. Wright, W. D. Cunningham, Marie Burkey.

The following Emergency Field Units have been assigned from St. Elizabeth's and Youngstown Hospitals.

YOUNGSTOWN HOSPITAL

CHIEFS

R. R. Morrall
Walter B. Turner

S. J. Klatman—Leader; Sam Schwebel, L. K. Reed, Milton M. Yarmy.

Herman A. Kling—Leader; Gabriel De Cicco, C. A. Gustafson, L. H. Moyer.

James D. Brown—Leader; Oscar A. Axelsson, Walter J. Tims, Barclay M. Brandmiller.

J. L. Fisher—Leader; Craig C. Wales, Charles Warnock, A. W. Miglets.

V. A. Neel—Leader; A. R. Cukerbaum, F. S. Coombs, Morris S. Rosenblum.

ST. ELIZABETH'S HOSPITAL

CHIEFS

J. M. Ranz
I. C. Smith

J. K. Herald—Leader; J. J. Wasilko, M. J. Sunday, J. L. Scarnecchia.

W. Z. Baker—Leader; J. Colla, H. J. Reese, W. E. Sovik.

A. C. Marinelli—Leader; H. E. Chalker, J. Kupec, S. Tamarkin.

P. J. Mahar—Leader; L. S. Shensa, A. C. Montani, W. E. Maine.

Staff Meeting

The staff meeting of Tuberculosis Sanatorium will be held Tuesday, March 24th, 8:30 p. m. at the Sanatorium. Speaker: Dr. M. M. Perlich of Cleveland, Chief T. B. Service, City Hospital. Subject: Pneumoperitoneum in the Treatment of Tuberculosis.

Hot Stuff

"So your mother-in-law's been sick? What was her temperature this morning?"

"Well, it wouldn't be fair for me to say. She died yesterday!"

(From Ha, Ha!)

Dr. Rogoff Interesting

At the February meeting (Feb. 17th) the speaker, Dr. J. M. Rogoff, discussing the Adrenals in Relation to Diabetes and Hypertension, rather effectively "gave the air" to much that has been widely accepted. Whether or not his experimental evidence agrees with that of clinicians and surgeons, it is certain that nobody challenged his statements, a privilege the doctor invited his audience to exercise.

The audience gave close attention to a most stimulating and interesting discussion. Later an abstract of the address will be printed in the Bulletin.

Sidney McCurdy Active

Dr. Sidney McCurdy, Captain in the Medical Corps of the U. S. Army in World War I, is on the job as Medical Director of Civilian Defense for Northeastern Vermont. Dr. McCurdy will be remembered for his many years as one of our own Society "Actives." A few years ago he accepted the position of Medical Director of the State Industrial Commission. After several years of efficient work, "Sid" left them and went to his "refuge" to take his well-earned ease! But, no; his State and Country need him,—and he responds, as his old Mahoning County friends expected him to do.

NEXT MEETING

The Woman's Auxiliary

to the

Mahoning County Medical Society

Tuesday Evening.....March 17th.

Speaker

A. E. Brant, M. D.

Subject Cancer

"We have dedicated ourselves to stand shoulder to shoulder with our doctors, in the cause of our country."

CROSS DRUGS

YOUNGSTOWN OWNED AND OPERATED

Prescriptions Delivered To Your Patients

6 EAST FEDERAL STREET
In the Stambaugh Bldg.

1 WEST FEDERAL STREET
In Central Tower

Five Pharmacists to Serve You

• • •

WE INVITE YOU TO VISIT OUR
PRESCRIPTION DEPARTMENTS



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



MALPRACTICE LIABILITY

\$10,000 - \$30,000 Coverage
\$25.00

Physicians Instrument
Floater \$5.00.

Phone for Sample Policy.

**THE JOHN P. FRANCIS
AGENCY**

1403 Central Tower Bldg.
Phone 64269

Are You Thirsty?

**Renner Premium
Beer and Ale
will "hit the spot"
EVERYTIME!**

Order a home carton now.
You'll be pleasantly surprised
at the outstanding qualities of
taste and flavor. You, too, will
say "Ah-h-h, that hits the spot."

• • •

Phone 44467

**THE
RENNER BREWING
COMPANY**

YOUNGSTOWN, OHIO

H. H. TREUDLEY & CO. INC.

123 E. COMMERCE STREET
OFFICE SUPPLIES
ACCOUNT BOOKS

STEEL & WOOD OFFICE
FURNITURE

For Prompt Service
Call 4-4479

March



Honor Roll

In Military Service

Raymond S. Cafaro	J. S. Goldcamp	Stanley A. Myers
Sidney L. Davidow	Joseph P. Keogh	Thomas E. Patton
Samuel Epstein	Herman H. Ipp	Asher Randell
S. D. Goldberg	O. M. Lawton	J. A. Renner
Henry Sisek		

St. Elizabeth's Internes

Nathan D. Belinky	Stephen W. Ondash	Geo. L. Armbrecht
John T. Murphy	Donald Birmingham	David D. Calucci
Edw. F. Hardman	Morris I. Heller	Adanto D. Amore

Youngstown Hospitals' Internes

Louis R. Kent	Charles R. Sokol	W. Frederick Bartz
Paul W. Suitor	Woodrow S. Hazel	Frederick R. Tingwald



Recently Returned from Military Service

Ivan C. Smith	Myron H. Steinberg	J. J. Wasilko
---------------	--------------------	---------------

We shall do our very best to carry each month, the names of all our Medical Men who are in any branch of Military Service. In order that we may miss nobody, will those who enter the service, and other members of the Society, please see that I am notified promptly? Furthermore, we, your fellow members at home, would be delighted to have a word from you for the Bulletin. Won't you tell us about yourselves and as much as you can about your service?

CLAUDE B. NORRIS, Editor

Phone 37418

BAUER & BLACK

Elastic Stockings

**Have the Acceptance of
Glamour-Minded Women**

Many a woman who needs the comfort of elastic stockings for surface varicose veins is persuaded only with difficulty to wear them . . . until she sees how inconspicuous Bauer & Black elastic hose are under her usual sheer stockings. Carefully designed . . . these elastic hose are expertly fitted in our—



CORSET SHOP—SECOND FLOOR

STROUSS-HIRSHBERG'S



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



LET US SUPPLY YOUR

OFFICE FURNITURE

**OPERATING
TABLES**

**INSTRUMENT
CABINETS**

**STERILIZER
STANDS**

**OFFICE
SCALES**

**FLOOR
LAMPS**

**PELTON
and
CASTLE
STERILIZERS**

**REVOLVING
STOOLS**

**WASTE
RECEPTACLES**

Lyons Physician Supply Company

SICK ROOM AND SURGICAL SUPPLIES

26 Fifth Avenue

YOUNGSTOWN, OHIO

Phone 4-0131

March

SINCE LAST MONTH

Dr. E. H. Young spoke on "Blood Plasma and Other Fluids in the Treatment of Shock and Allied Conditions" at the January meeting of the Staff of St. Elizabeth's Hospital. Doctors Young and Collier then presided over a question and answer period on this subject.

A Blood Plasma Bank has been installed at St. Elizabeth's Hospital. Details of its operation are posted on the hospital bulletin board. Dr. E. H. Young is in charge of the bank.

Dr. Morrison Belmont has been appointed to the Active Surgical Staff, limited to thoracic surgery, and Dr. W. E. Sovik to the Associate Medical Staff of St. Elizabeth's Hospital.

Dr. C. D. Hauser was unanimously re-elected as the St. Elizabeth's Hospital Staff Representative to the Associated Hospital Service, Incorporated.

Dr. J. K. Herald and Catherine Moore were married in St. Edward's Church, Saturday, February 14th.

Dr. and Mrs. P. R. McConnell announce the birth of a daughter, Marianne, at St. Elizabeth's Hospital on February 13th.

Dr. William Mermis, brother of Dr. W. O. Mermis, is now associated with him at his office on Mahoning Avenue.

Dr. R. E. Whelan is in St. Elizabeth's Hospital convalescing from a recent illness. He is permitted to see visitors and welcomes visits by his medical colleagues.

Dr. and Mrs. Michael Sunday announce the birth of a daughter in St. Elizabeth's Hospital on February 27th.

Dr. and Mrs. A. M. Rosenblum are in Florida for several weeks stay. Dr. Rosenblum is recuperating from a rather severe attack of Trigeminal

Neuritis. He is reported much improved.

Dr. and Mrs. H. E. Mathay announce the birth of a son, John Preston, on January 27th, North Side Unit.

Dr. and Mrs. Fred Coombs announce the birth of a daughter, Alice Anne, on February 23rd, North Side Unit.

Dr. H. E. Patrick announces the engagement and approaching marriage of his daughter, Grace, to Dr. Myron S. Owen, Ravenna, Ohio. Dr. Owen was a former Interne and Medical Resident at Youngstown Hospital. The wedding is to be on April 18th, 3:45 P. M., at the Memorial Presbyterian Church. Open church is to be observed.

Dr. and Mrs. D. M. Rothrock are spending a month in sunny Florida. Having visited at St. Petersburg with Mrs. Rothrock's father and sister, are at present guests at Indian Queen Hotel, Miami Beach, expecting to return March 8th.

Dr. John A. Rogers spent a short time in Boston, Mass., taking a post-graduate course.

Dr. and Mrs. J. Clair Vance and sons, Dick and Jack, left on February 26th for Fort Lauderdale, Florida. They expect to remain there until after April 1st.

Dr. and Mrs. W. H. Bunn are spending a few weeks vacation in Florida. They plan to meet Mrs. Bunn's father, Mr. Frank Rownd, at Daytona Beach.

Dr. Samuel Epstein has been promoted to the rank of Captain. He and Mrs. Epstein are at Columbia, S. C.

A dinner in honor of Miss Alice Barth, anaesthetist of Youngstown Hospital, who has enlisted for service in Hawaii, was held at the Youngstown Club, February 16th, 1942.

This Publication Printed by

The Youngstown Printing Co.

Youngstown, Ohio



PATRONIZE OUR ADVERTISERS AND MENTION THE BULLETIN



PREMO

Available in Youngstown
District

BEATINE Brand of Thiamin
Chloride in Elixir and Tablet
forms. Quality medication at
a reduced cost to the patient.

• • •

Valley Drug Company

Wholesale Distributors

318 W. Boardman St.
Phone 40284

ANTONUCCI
TRADE MARK
REG. U.S. PAT. OFF.
SELUGENE

A Dependable Appetizer

BITTER WINE TONIC

Recommended for convales-
cence, run down condition
and persons of old age who
need a food Tonic.

• • •

SOLD IN DRUG STORES

March

SECRETARY'S REPORT . . .

The regular February Council meeting was held on the 9th of the month at the office of the Secretary.

The regular February meeting of the Society was held at the Youngstown Club on the 17th of the month. The speaker was Dr. J. M. Rogoff, Professor of Endocrinology, Medical School, University of Pittsburgh, and his subject, "The Adrenal Glands in Relation to Hypertension and Diabetes."

Presentation of gavels to past presidents, Drs. O. J. Walker, Wm. M. Skipp and R. B. Poling was made by Dr. C. B. Norris.

Mr. Daniels of the American Red Cross will be here the week of March 16th to give Refresher Course to Doctors who volunteer to teach First Aid.

Register with the Mahoning County Chapter of the Red Cross if you wish to volunteer.

Also are needed, volunteers to teach Air Raid Wardens First Aid. This course is only 10 hours as compared to 20 hours for regular Red Cross First Aid Course. Plenty of volunteers are needed so register now!

A report was given by Dr. L. K. Reed on Conference of Medical Service Plans held in Chicago, February 14th. Dr. Reed urges approval of a plan anticipating possible action by the State Legislature if the Medical Profession is not prepared.

G. M. McKelvey, M. D.,
Secretary.

Letter to the Membership

February 11, 1942

Dear Doctor:

Please be informed there are two morphine addicts going from office to office annoying the doctors.

1st: Female, blond, tall, thin, about forty and has a Southern accent. Gives a very plausible story of wanting to leave town to go to a Tuberculosis Sanatorium for treatment.

2nd: Male, dark hair, blue eyes,

6 feet tall, weighs 190 lbs., about 35 years of age and has a Boston accent. Says he is a salesman and complains of severe backache.

Be on your guard.

Respectfully,
Mahoning County Medical Society,
G. M. McKelvey, M. D.,
Secretary.

A. W. Now in Cleveland!

Dr. A. W. Thomas, whose foresight and imagination made this Bulletin a month-to-month reality, has recently become chief of the Sub-division of Child Hygiene in the Cleveland Division of Health.

As President of the Mahoning County Medical Society, Dr. Thomas pioneered in the great progress our Society has made during the past fifteen years. We owe to his initiative the early effort that moved us from a small room at the Public Library, where a few doctors years ago met in discomfort to hear Scientific Programs, to our present pleasant meeting place where two hundred and more regularly hear the choice talent of the nation.

His old friends wish him unbounded success in his new duties.

LAY EDUCATION

The following radio talks were delivered on WKBN during the month of January:

National Defense by Dr. H. A. Kling on January 1.

Prevention and Treatment of Burns, by Dr. L. K. Reed on January 14.

Hazards of Modern Day Living, by Dr. C. C. Wales on January 21.

High Blood Pressure, by Dr. C. H. Warnock on January 28.

Walter J. Tims, M. D.,
Chr. of Lay Education Committee.

"A DOCTOR'S BAG" was reprinted in full in the *Bulletin* of the New Orleans Parish Medical Society for January 12th, 1942. Thus our talented JIMMY FISHER triumphs!

George Madtes to Address Doctors

Socialized Medicine will be the subject under discussion when Mr. George Madtes, Editorial writer for the Youngstown Vindicator speaks at the March luncheon of the Medical-Dental Bureau. Although a layman, Mr. Madtes enjoys a unique position in the esteem of his friends in the two professions. Long interested in medical problems he has attended and reported upon so many scientific meetings of the Medical Society and the Corydon-Palmer Dental Society that he is known and welcomed as an unofficial member of both organizations. It might be said that Mr. Madtes knows doctors at work as well as at play, better than they know themselves. He knows them from the patient's angle, too.

George says that unlike the doctors he is not afraid of the word "socialized." He went to school under socialized teachers, has been arrested by socialized police and calls the socialized firemen when his house is burning. He is willing to call the socialized doctors but doesn't say what he will call them. If you really want to know, you will have to come and hear for yourself.

The meeting will be at the Tod Hotel at noon on Thursday, March 12th. All members of the medical and dental professions are invited to be guests of the Bureau. Call 4-4513 for reservations.

"The Editor Squeaks" for Sale

Mack Sauer, the country newspaper editor who addressed our annual banquet at the Youngstown Club, Tuesday evening, January 20th, claims to have a "miraculous liver medicine." He says it has worked wonders for many folks.

The "miraculous liver medicine" is none other than his own book of humor, "The Editor Squeaks," 21 copies of which were sold following the banquet here January 20th, and, no doubt, more would have been sold that night had his supply not become exhausted.

By the way, if you weren't among the 21 physicians who got a copy of this book, you can have an autographed copy sent direct by sending \$1, plus 3¢ Ohio sales tax, to Mack Sauer, Leesburg, Ohio.

The author is jumping here and there, bringing laughs to folks everywhere. Since his appearance in Youngstown, he has been in Ohio, Indiana, Pennsylvania, and Georgia. He leaves next week for South Dakota to speak at a state convention.

C. B. CASSADAY

260 Lincoln Avenue

EXCLUSIVE
PRESCRIPTION
PHARMACY

Phone 40107

THE ROYAL HOTEL

HONEY HARBOUR, GEORGIAN BAY, CANADA

Doctor:—Come up to scenic Georgian Bay to enjoy that much needed rest and get in some excellent Bass, Muskie, Great Northern Pike and Pickerel fishing. A rest at the Royal is the best prescription known for the busy M. D., and the Royal guest list contains names of many eminent American physicians and surgeons.

Folder and rates on request.

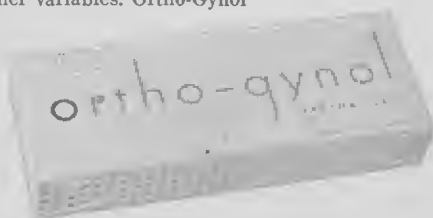
PHIL GRISE, Owner and Manager.

March



March Winds ... herald the transition from the cold of winter to the warmth of springtime... Climate and weather are important considerations in the preparation of vaginal jellies. They must be stable under all normal conditions of temperature, moisture and other variables. Ortho-Gynol is prescribed and used in the cold of Alaska as well as in the jungle heat of equatorial South America. When you prescribe it you may be sure your patient can always obtain it in good condition anywhere.

COPYRIGHT 1942 ORTHO PRODUCTS, INC.
LINDEN, N. J.



1930 Tisdall, F. P., Drake, T. G. H., and Brown, A.: A new cereal mixture containing vitamins and mineral elements, *Am. J. Dis. Child.* 40:791-799, Oct. 1930.

1931 Tisdall, F. P.: Dietary factors and health, *Soc. Tr., Am. J. Dis. Child.* 42:1490, Dec. 1931.

1932 Summerfeldt, P.: The value of an increased supply of vitamin B₁ and iron in the diet of children, *Am. J. Dis. Child.* 43:284-290, Feb. 1932. Morse, J. L.: Fads and fancies in present day pediatrics, *Pennsylvania M. J.* 35:280-285, Feb. 1932. Henricke, S. G.: The vitamin B complex: Its role in infant feeding in the light of our present knowledge, *Northwest Med.* 31:165-169, April 1932. Langhorst, H. P.: Vitamins: Their role in the prevention and treatment of disease, *M. J. & Rec.* 135:326-329, April 6, 1932. Crimm, P. D.: Dietary of Childhood Tuberculosis: Cereal as a source of added mineral and vitamin element: preliminary report, *J. Indiana M. A.* 25:205-206, May 1932. Troutt, L.: Quality studies of therapeutic diets: I. The ulcer diet; committee report, *J. Am. Dietet. A.* 8:25-32, May 1932. Summerfeldt, P., Tisdall, F. P., and Brown, A.: The curative effects of cereals and biscuits on experimental anaemias, *Canad. M.A.J.* 26:666-669, June 1932. Snead, W.: Ununited and delayed union of fractures, *Kentucky M. J.* 30:363-370, July 1932. Silvern, A. A.: Celiac disease, *New York State J. Med.* 32:1055-1061, Sept. 15, 1932. von Meysenburg, L.: Infant feeding with special reference to some of its problems during the first year, *Texas State J. Med.* 28:543-547, Dec. 1932.

1933 Wampler, R. J., and Forbes, J. C.: Calcium and phosphorus metabolism in a case of celiac disease, *South. M. J.* 26:555-558, June 1933. Brown, A., and Tisdall, F. P.: The role of minerals and vitamins in

the diet of children: Paper II, *Am. J. Dis. Child.* 49:1185-1198, May 1935. von Meysenburg, L.: Breast feeding with special reference to some of its problems, *New Orleans M. & S. J.* 87:738-743, May 1935. Tarr, E. M., and McNeile, O.: Relation of vitamin B deficiency to metabolic disturbances during pregnancy and lactation, *Am. J. Obst. & Gynec.* 29:811-818, June 1935. Blatt, M. L., and Schapiro, I. E.: Influence of a special cereal mixture on infant development, *Am. J. Dis. Child.* 50:324-336, Aug. 1935. Coward, N. B.: Infant feeding, *Nova Scotia M. Bull.* 14:525-532, Oct. 1935. Tisdall, F. P.: Inadequacy of present dietary standards, *Tr. Sect. Pediat., A.M.A.*, 1935: Canad. M. A. J. 33:624-628, Dec. 1935. Marriott, W. McK.: Infant Nutrition, second edition, C. V. Mosby Co., St. Louis, 1935, p. 202. Summerfeldt, P.: Iron and its availability in foods, *Tr. Sect. Pediat., A.M.A.* 1935, pp. 214-220.

1936 Dafoe, A. R.: Further history of the care and feeding of the Dionne quintuplets, *Canad. M. A. J.* 34:26-32, Jan. 1936. Conn, L. C., Vant, J. R., and Malone, H. M.: Some aspects of maternal nutrition, *Saf. Gynec. & Obst.* 62:377-383, Feb. 15, 1936. Ross, J. R., and Summerfeldt, P.: Haemoglobin of normal children and certain factors influencing its formation, *Canad. M. A. J.* 34:155-158, Feb. 1936. Smyth, S. S.: Allergic diseases, *J. Pediat.* 8:500-515, April 1936. Lemmon, J. R.: Problems of the crying infant, *Southwestern Med.* 20:248-250, July 1936. Rice, C. V.: The success of treating celiac disease from a standpoint of vitamin deficiency, *Arch. Pediat.* 53:626-629, Sept. 1936. Smith, C. H.: Management of nutritional anemia in infancy, *Can. North America* 20:933-950, Nov. 1936. Strong, R. A., editor: Nutritional anemia of infants, *Orleans Parish M. Soc. Bull.*, pp. 6-9, Nov. 9, 1936. Jeans, P. C.: Specific factors in nutrition, *Round Table discussion, J. Pediat.*

utilization of calcium, *J. Nutrition* 16:613-620, Dec. 1938. Drake, T. G. H.: Introduction of solid foods into the diets of children, *Canad. M. A. J.* 39:578-580, Dec. 1938.

1939 Strong, R. A.: The most frequent causes of vomiting in infancy, *Texas State J. Med.* 34:665-676, Feb. 1939. Ratner, B., and Gruel, H. L.: Anaphylactogenic properties of certain cereal foods and breadstuffs: Allergic denaturation by heat, *Am. J. Dis. Child.* 57:739-758, April 1939. Monypenny, D.: Early introduction of solid foods in the infant diet, *Soc. Tr., Am. J. Dis. Child.* 58:1141-1145, Nov. 1939. Brown, A., and Tisdall, F. P.: Common Procedures in the Practice of Paediatrics, third edition, McClelland & Stewart, Ltd., Toronto, 1939, pp. 77-79.

1940 McDougal, L. L., Jr.: Feeding a normal infant, *Mississippi Doctor* 17:437-442, Jan. 1940. Monypenny, D.: The early introduction of solid foods in the infant diet, *Canad. M. A. J.* 42:137-140, Feb. 1940. Robinson, E. C.: A study of two hundred and forty breast-fed and artificially fed infants in the St. Louis area, *Am. J. Dis. Child.* 58:846-827, April 1940. Ratner, B.: Round Table discussion on food allergy, *J. Pediat.* 16:653-672, May 1940. Rosenbaum, I., Jr.: The management of the allergic child, *Kentucky M. J.* 38:199-203, May 1940. Baronides, R. de R.: Report of a case of pellagra, *M. Rec.* 151:376-380, June 5, 1940. The fourth Blackader lecture on a decade of paediatric progress, *Canad. M. A. J.* 43:305-313, Oct. 1940. Drueck, C. J.: Vitamin therapy in colon and rectal disease, *Illinois M. J.* 78:337-341, Oct. 1940. Swift, F. L.: Infant feeding, *Lackawanna Co. B. M. Soc. Reporter*, 33:16-18, Nov. 1940. Bogert, L. J., and Porter, M. T.: Dietetics Simplified, ed. 2, Macmillan Co., New York, 1940, p. 181. Davison, W. C.: The Complete Pediatrician, third edition, Duke University Press, Durham, N. C., 1940, No. 216. Hawley,

SCIENTIFIC BACKGROUND

Mead's Cerea was introduced in 1930, and Pabulum in 1932, by Mead Johnson & Company. Since then, the growing literature indicates early recognition and continued acceptance of these products and the important pioneer principles they represent.

growth and resistance to infection, *Brit. M. J.* 1:55-57, Jan. 1933. Effect of vitamins and the inorganic elements on growth and resistance to disease in children, *Ann. Int. Med.* 7:342-352, Sept. 1933. Crimm, P. D., Raphael, I. J., and Schnute, L. F.: Diet of tuberculous and non-tuberculous children: Effect of increased supply of vitamin B concentrate and minerals, *Am. J. Dis. Child.* 46:751-756, Oct. 1933. Smith, A. D.: Consideration of various infants' foods, *Pacific Coast J. Homeop.* 44:463-465, Sept.-Dec. 1933.

1934 Somers, R., Rotton, G. C., and Rowntree, J. I.: Possibilities of improving diet structures, *Soc. Tr. Bull. King Co. M. Soc.* 13:6, Jan. 15, 1934. Blatt, M. L.: Development of infants on a diet of a special cereal mixture, *Soc. Tr., Am. J. Dis. Child.* 47:918, April 1934. Rice, C. V.: Anemia of infancy and early childhood, *J. Oklahoma M. A.* 27:125-129, April 1934. Hawley, W. A.: A few of the commoner feeding problems in infancy, *Univ. Toronto M. J.* 11:218-229, May 1934. Ross, J. R., and Burrill, L. M.: The effect of cooking on the digestibility of cereals, *J. Pediat.* 4:534-559, May 1934. Rice, C. V.: Sauerkraut juice for the acidification of evaporated milk in infant feeding, *Arch. Pediat.* 51:390-395, June 1934. Eder, H. L.: Iron therapy: A routine procedure during infancy, *Arch. Pediat.* 51:701-713, Nov. 1934. Lynch, H. D.: Fundamentals of infant feeding, *J. Indiana M. A.* 27:571-574, Dec. 1934. Chaney, M. S., and Ahlborn, M.: Nutrition, Houghton Mifflin Co., Boston, 1934, p. 323.

1935 Bailey, C. W.: Anemia in infants and young children, *J. South Carolina M. A.* 31:54-58, March 1935. Kugelmann, N.: The recent advances in treatment of nutritional disturbances in infancy and childhood, *M. Comment* 17:5-13, March 1, 1935. Ross, J. R., and Summerfeldt, P.: Value of increased supply of vitamin B₁ and iron in

9:693-698, Nov. 1936. Young, J. G.: Meeting the requirements for proper nutrition in infancy, *Texas State J. Med.* 32:531-533, Dec. 1936.

1937 Stearns, G., and Stinger, D.: Iron retention in infancy, *J. Nutrition* 13:127-141, Feb. 1937. Strong, R. A.: Nutritional anemia, *Mississippi Doctor* 15:13-16, Aug. 1937. Smith, C. H.: Prevention and treatment of nutritional anemia in infancy, *Preventive Med.* 7:115-124, Aug. 1937. Saxl, N. T.: Pediatrics, in Dietetics for the Clinician, edited by M. A. Bridges, third edition, Lea & Febiger, Philadelphia, 1937, pp. 637-639. Boyd, J. D.: Nutrition of the Infant and Child, National Medical Book Co., Inc., New York, 1937, p. 110. Brennemann, J.: Practice of Pediatrics, W. F. Prior Co., Inc., Hagerstown, Md., 1937, Vol. 1, Ch. 25, p. 5. Griffler, J. F. C., and Mitchell, A. G.: The Diseases of Infants and Children, second edition, W. B. Saunders Co., Philadelphia, 1937, pp. 106, 111. Saxl, N. T.: Pediatric Dietetics, Lea & Febiger, Philadelphia, 1937, pp. 131-133.

1938 Hoffman, S. J., Greenhill, J. P., and Lundeen, E. C.: A premature infant weighing 735 grams and surviving, *J.A.M.A.* 110:283-285, Jan. 22, 1938. Krasnow, F.: Nutritional influence on teeth, *Am. J. Pub. Health* 28:325-333, March 1938. Ratner, B.: Round Table discussion on asthma and hay fever in children, *J. Pediat.* 12:390-413, March 1938. Ratner, B.: Panel discussion on the role of allergy in pediatric practice, *J. Pediat.* 13:582-604, Oct. 1938. Snelling, C. E.: Nutritional anaemia, *Bull. Acad. Med. Toronto* 12:710, Oct. 1938. Dauphinee, J. A.: The iron requirement in normal nutrition, *Canad. M. A. J.* 39:483-486, Nov. 1938. Summerfeldt, P., and Ross, J. R.: Value of an increased supply of vitamin B₁ and iron in the diet of children, *Paper III, Am. J. Dis. Child.* 56:985-988, Nov. 1938. Tisdall, F. P., and Drake, T. G. H.: The

E. E., and Maurer-Mast, E. E.: The Fundamentals of Nutrition, C. C. Thomas, Springfield, Ill., 1940, pp. 296, 456. Kugelmann, I. N.: The Newer Nutrition in Pediatric Practice, J. B. Lippincott Co., Philadelphia, 1940, p. 372. Leaman, W. G.: Jr., Management of the Cardiac Patient, J. B. Lippincott Co., Phila., 1940, p. 549. Paterson, D., in Index of Treatment, edited by R. Hutchison, ed. 12, revised, Williams & Wilkins Co., Baltimore, 1940, p. 491. Thomas, G. L.: Dietary of Health and Disease, ed. 3, revised, Lea & Febiger, Phila., 1940, pp. 171, 177, 178.

1941 Gipson, A. C.: The role of allergy in pediatric practice, *J. M. A. Alabama* 10:272-274, Feb. 1941. Ross, J. R., Monypenny, D., and Jackson, S. H.: II. The effect of cooking on the digestibility of cereals, *J. Pediat.* 18:395-398, March 1941. Kennedy, A. S., Snider, O., Hazen, J. S., and McLeod, C.: The dietary management of intestinal tuberculosis, *Canad. M. A. J.* 41:380-385, April 1941. McAlpine, K. L.: Management of the nutritional anaemia of infancy, *Canad. M. A. J.* 44:385-390, April 1941. Patek, A. J., Jr., and Post, J.: Treatment of cirrhosis of the liver by a nutritious diet and supplements rich in vitamin B complex, *J. Clin. Investigation* 20:481-505, Sept. 1941. Bercovitz, Z., and Johnson, H. J.: Ulcerative Colitis, in Dietetics for the Clinician, by M. A. Bridges, fourth edition, revised, Lea & Febiger, Phila., 1941, p. 295. Bridges, M. A.: Dietetics for the Clinician, fourth edition, revised, Lea & Febiger, Phila., 1941, pp. 727-731, 809. Griffith, J. P. C., and Mitchell, A. G.: Textbook of Pediatrics, ed. 3, revised, W. B. Saunders Co., Phila., 1941, pp. 87, 91. Rowe, A. H.: Elimination Diets and the Patient's Allergies, Lea & Febiger, Phila., 1941, p. 230. Twiss, J. R.: Gall-bladder Disease, in Dietetics for the Clinician, by M. A. Bridges, fourth edition, revised, Lea & Febiger, Phila., 1941, p. 401.